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Volume III, Issue 2
February 2013

BNL ACTs to Help Develop Technologies

Brookhaven Science Associates (BSA) has received approval from the U.S. Department of Energy (DOE) to participate in a pilot initiative to make it easier for companies and other organizations to take advantage of Brookhaven Lab's research capabilities. This initiative is intended to expand the deployment of America's unique advantages in innovation through the national laboratories to create jobs and accelerate the development of new clean energy and other state-of-the-art technologies.

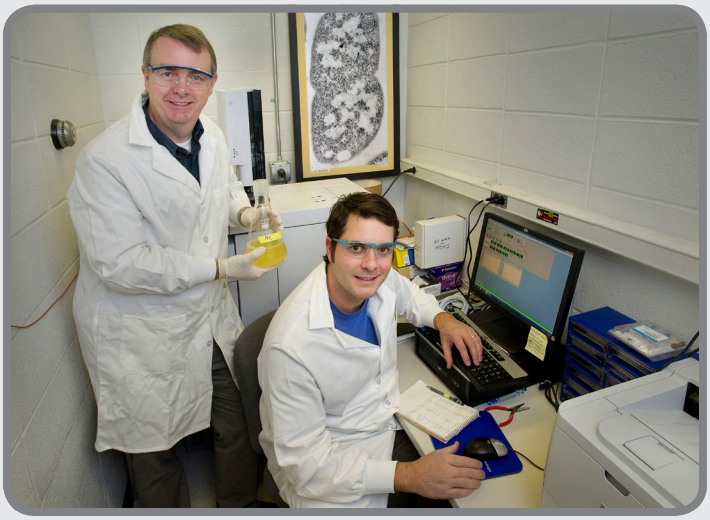
Agreements for Commercializing Technology, or ACT, will reduce the barriers for businesses and startups interested in working with the national laboratories. ACT, which Brookhaven had a strong role in developing, will help bring job-creating technologies to the market faster.

ACT also complements the goals of the "Startup America" initiative and is a key part of the DOE's response to call to "Accelerate Technology Transfer and Commercialization of Federal Research in Support of High-Growth Business."

To learn more about technology and partnership opportunities at Brookhaven visit: www.bnl.gov/techtransfer/#

Lab and DOE staff on the ACT project team

Turning Toxic By-Product Into Biofuel Booster



Lead researcher John Shanklin and former postdoc Carl Andre

Brookhaven scientists studying an enzyme that naturally produces alkanes – long carbon-chain molecules that could be a direct replacement for the hydrocarbons in gasoline – have figured out why the natural reaction typically stops after three to five cycles. Armed with that knowledge, they've devised a strategy to keep the reaction going. The biochemical details renew interest in using the enzyme in bacteria, algae, or plants to produce biofuels that need no further processing.

"Alkanes are very similar to the carbon-chain molecules in gasoline. They represent a potential renewable alternative to replace the petrochemical component of gasoline," said biochemist John Shanklin, who led the research. "Unlike the process of breaking down plant biomass to sugars and fermenting them to ethanol, biologically produced alkanes could be extracted and used directly as fuel."

Read more about this exciting research at: www.bnl.gov/newsroom/news.php?a=11495

Seeking the Next Generation Wood Stove

Examining new emissions-testing equipment

In 2012, the Alliance for Green Heat issued a Next Generation Wood Stove Design Challenge that seeks to promote innovation in wood stoves. The design finalists will bring their stoves to the National Mall in Washington D.C. in November, 2013 to participate in a Wood Stove Decathlon.

Recently, Brookhaven's Sustainable Energy Technologies Department hosted a gathering of the individuals who will serve as judges for the Decathlon. Eight members of the Wood Stove Design Challenge team met at the Lab over two days to review innovative designs and to examine new wood appliance testing equipment that will likely be used to judge the entries.

"Wood use for home heating is increasing and is becoming a major source of fine particle air pollution in the Northeast," said Tom Butcher, head of the Lab's Energy Conversion Group and a Decathlon judge. "This event will highlight advanced technologies that can help address this problem and enable continued use of this renewable fuel."

To learn more about the Challenge visit: www.forgreenheat.org/stovedesign.html

Happenings

- **March 6 –** Concert. Violinist Kristin Lee will perform from a selection of works by Kreisler, Debussy and Ravel, as well as selections from Gershwin's Porgy and Bess. Noon, Berkner Hall Auditorium.
- **March 14 –** Community Advisory Council Meeting. 6:30 p.m., Berkner Hall, Room B.

*The events above are free and open to the public. Visitors 16 and over must bring a photo ID for access to BNL events.

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LabLink is a monthly publication from Brookhaven National Lab's Community Relations Office that will keep you informed about happenings at the Laboratory, help you understand some of the science behind our research, and invite you to our many educational and cultural events. To learn more about the Lab visit www.bnl.gov.

BROOKHAVEN NATIONAL LABORATORY

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